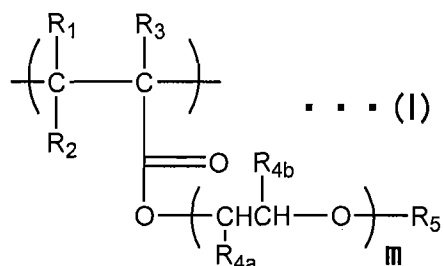


### AMENDMENTS TO THE CLAIMS

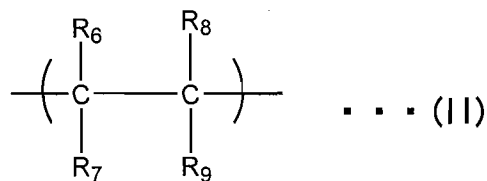
The following listing of claims replaces all prior versions, and listings, of claims in this application.

Claim 1 (**Currently Amended**): A solid polymer electrolyte comprising an electrolyte salt, and a copolymer in which  
a block chain A containing a repeating unit represented by a formula (I) shown below:



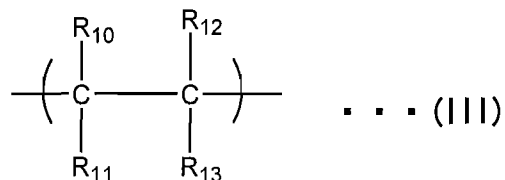
(wherein, R<sub>1</sub> to R<sub>3</sub> each represent, independently, a hydrogen atom or a hydrocarbon group of C1 to C10, R<sub>1</sub> and R<sub>3</sub> may be bonded together to form a ring, R<sub>4a</sub> and R<sub>4b</sub> each represent, independently, a hydrogen atom or a methyl group, R<sub>5</sub> represents a hydrogen atom, a hydrocarbon group, an acyl group, or a silyl group, m represents an integer from  $\frac{10}{2}$  to 100, and individual R<sub>4a</sub> and R<sub>4b</sub> groups are either identical or different),

a block chain B containing a repeating unit represented by a formula (II) shown below:



(wherein, R<sub>6</sub> to R<sub>8</sub> each represent, independently, a hydrogen atom or a hydrocarbon group of C1 to C10, and R<sub>9</sub> represents an aryl group), and

a block chain C containing a repeating unit represented by a formula (III) shown below:



(wherein, R<sub>10</sub> to R<sub>12</sub> each represent, independently, a hydrogen atom or a hydrocarbon group of C1 to C10, and R<sub>13</sub> represents an aryl group or a heteroaryl group)

are arranged in a sequence B, A, [[C.]]C,

wherein the copolymer exhibits a microphase separated structure.

Claim 2 (**Canceled**).

Claim 3 (**Previously Presented**): A solid polymer electrolyte according to claim 1, wherein said block chains A to C form a copolymer with a B-A-C bonding sequence.

Claim 4 (**Previously Presented**): A solid polymer electrolyte according to claim 1, wherein a degree of polymerization of a repeating unit represented by said formula (I) is at least 10.

Claim 5 (**Previously Presented**): A solid polymer electrolyte according to claim 1, wherein a degree of polymerization of a repeating unit represented by said formula (II) is at least 5.

Claim 6 (**Previously Presented**): A solid polymer electrolyte according to claim 1, wherein a degree of polymerization of a repeating unit represented by said formula (III) is at least 5.

Claims 7-8 (**Canceled**).

Claim 9 (**Previously Presented**): A solid polymer electrolyte according to claim 1, wherein said group  $R_{13}$  in said formula (III) is an aryl group, and a degree of polymerization of a repeating unit represented by said formula (III) is at least 5.

Claim 10 (**Canceled**).

Claim 11 (**Previously Presented**): A solid polymer electrolyte according to claim 1, wherein a molar ratio  $((I)/((II)+(III)))$  between repeating units represented by said formula (I), and a combined total of repeating units represented by said formula (II) and repeating units represented by said formula (III) is within a range from 1/30 to 30/1.

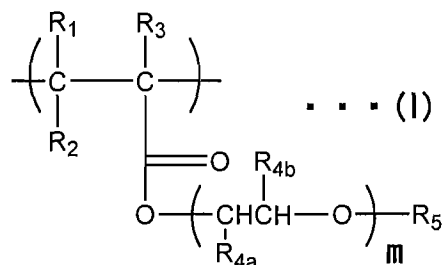
Claim 12 (**Previously Presented**): A solid polymer electrolyte according to claim 1, wherein a number average molecular weight of said copolymer is within a range from 5,000 to 1,000,000.

Claim 13 (**Canceled**).

Claim 14 (**Currently Amended**): A solid polymer electrolyte according to claim 1, wherein said electrolyte salt is one or more materials selected from [[a]]the group consisting of alkali metal salts, quaternary ammonium salts, quaternary phosphonium salts, transition metal salts, and protonic acids.

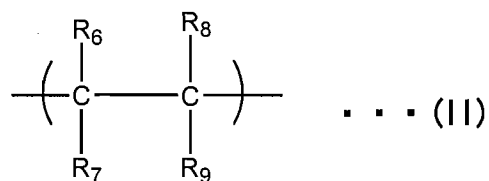
Claim 15 (**Previously Presented**): A solid polymer electrolyte according to claim 1, wherein said electrolyte salt is a lithium salt.

Claim 16 (**Currently Amended**): A copolymer in which  
 a block chain A containing a repeating unit represented by a formula (I) shown below:



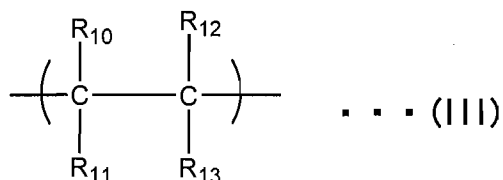
(wherein, R<sub>1</sub> to R<sub>3</sub> each represent, independently, a hydrogen atom or a hydrocarbon group of C1 to C10, R<sub>1</sub> and R<sub>3</sub> may be bonded together to form a ring, R<sub>4a</sub> and R<sub>4b</sub> each represent, independently, a hydrogen atom or a methyl group, R<sub>5</sub> represents a hydrogen atom, a hydrocarbon group, an acyl group, or a silyl group, m represents an integer from  $\left[ \frac{2}{11} \right] 10$  to 100, and individual R<sub>4a</sub> and R<sub>4b</sub> groups are either identical or different),

a block chain B containing a repeating unit represented by a formula (II) shown below:



(wherein, R<sub>6</sub> to R<sub>8</sub> each represent, independently, a hydrogen atom or a hydrocarbon group of C1 to C10, and R<sub>9</sub> represents an aryl group), and

a block chain C containing a repeating unit represented by a formula (III) shown below:



(wherein,  $R_{10}$  to  $R_{12}$  each represent, independently, a hydrogen atom or a hydrocarbon group of C1 to C10, and  $R_{13}$  represents an aryl group or a heteroaryl group)

are arranged in a sequence B, A,  $[[C.]]C$ ,

wherein the copolymer exhibits a microphase separated structure.

Claim 17 (**Original**): A copolymer according to claim 16, wherein said block chains A to C are bonded together in a B-A-C sequence.

Claim 18 (**Previously Presented**): A copolymer according to claim 16, wherein a degree of polymerization of a repeating unit represented by said formula (I) is at least 10.

Claim 19 (**Previously Presented**): A copolymer according to claim 16, wherein a degree of polymerization of a repeating unit represented by said formula (II) is at least 5.

Claim 20 (**Previously Presented**): A copolymer according to claim 16, wherein a degree of polymerization of a repeating unit represented by said formula (III) is at least 5.

Claims 21-22 (**Canceled**).

Claim 23 (**Previously Presented**): A copolymer according to claim 16, wherein said group  $R_{13}$  in said formula (III) is an aryl group, and a degree of polymerization of a repeating unit represented by said formula (III) is at least 5.

Claim 24 (**Previously Presented**): A copolymer according to claim 16, wherein a molar ratio  $((I)/((II)+(III)))$  between repeating units represented by said formula (I), and a combined total of repeating units represented by said formula (II) and repeating units represented by said formula (III) is within a range from 1/30 to 30/1.

**Claim 25 (Previously Presented):** A copolymer according to claim 16, wherein a number average molecular weight of said copolymer is within a range from 5,000 to 1,000,000.

**Claim 26 (Canceled).**

**Claim 27 (Previously Presented):** A method of producing a copolymer according to claim 16, which utilizes a living radical polymerization in which a transition metal complex is used as a catalyst, and an organohalogen compound comprising 1 or more halogen atoms is used as an initiator.

**Claims 28-29 (Canceled).**